



United States Department of Agriculture
Natural Resources Conservation Service

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LANDOWNER PROFILE

"The CNMP requirements aren't difficult, but not easy, either. You have to spend a fair amount of time walking the fields together and going over irrigation schedules and crop needs to get a good handle on how much water and manure should be put on each field."

— **Thad Konzen**

Thad Konzen's comprehensive nutrient management plan (CNMP) is brand new - so new, he is still figuring out what it might mean to the two dairy operations he manages near Oakdale, Calif.

The second-generation dairyman is herd manager for KB Dairy #1 and KB Dairy #2, a partnership formed by his father, Paul, and Mike Barry.

What is a CNMP? To Konzen it is a plan to help him manage the nutrients from his mostly Holstein 600-cow dairy herd the best he can.

"We just put the plan together, so we're still learning. We know it will help us use and disperse our manure properly, where it will do the most good. Sampling the fields will help us know where and how much fertilizer is needed and help us plan to use manure instead of commercial fertilizer as much as we can to save money on fertilizer," said Konzen.

Sells Milk to a Cheesemaker



Thad Konzen sells 100 percent of his milk to the Hilmar Cheese Company.

Founded in 1984 by 12 Central California dairy families, Hilmar Cheese produces nearly 2 million pounds of cheese each day from 2 million gallons of milk a day. The home plant in Hilmar processes more milk into cheese each day than any other single site in the world. The company, which employs more than 900 people, specializes in cheddar and American cheese, but also makes Monterey Jack, Pepper Jack, Colby, flavored Jacks, Mozzarella and more.



Joe Mota, left, and others at NRCS work with Thad Konzen to carry out a comprehensive plan to put all the nutrients KB Dairy's cows produce to good use.

Konzen worked with Dan Lamb, a technical service provider hired by the USDA Natural Resources Conservation Service (NRCS). The CNMP is meant to help Konzen address all the liquid and solid manure and water quality issues on the operation.

Walk the fields

“The CNMP requirements aren’t difficult, but not easy either,” said Konzen. “You have to spend a fair amount of time walking the fields together and going over irrigation schedules and crop needs to get a good handle on how much water and manure should be put on each field. We had enough time to bond,” Konzen jokes.

The CNMP came about after earlier work with NRCS. Joe Mota, a soil conservationist with NRCS who works out of the East Stanislaus Resource Conservation District, says Konzen has made good use of the Environmental Quality Incentives Program (EQIP).

“KB Dairy installed a concrete slab for silage storage, did some land leveling and installed tailwater return systems to keep irrigated manure water on the farm. The practices, including pipes and pumps, were all cost-shared by EQIP and each of those practices will help

keep the nutrients from KB Dairy on their farm,” said Mota.

“If your liquid manure gets into a creek or canal, you can be fined,” said Konzen. “I don’t know how much, and don’t want to find out.”

Konzen captures solid manure in a settling pond, where liquids are separated. He cleans the solids out twice a year and spreads them on fields. The liquids are routed to liquid storage ponds, then pumped to oat and corn silage fields. All the pastures are set up for irrigation. Earlier work with NRCS upgraded pasture irrigation systems to use manure as well as canal water. Konzen harrows corrals several times a week to keep them dry, then scrapes the solid manure from them. It’s stockpiled on cement pads until winter, when it is re-used as free stall bedding.

Still in process

“We’re still in the process of planning with NRCS for a larger concrete slab for manure storage,” said Konzen. “I’d also really like to put in flow meters so we know exactly how much manure water is going on our fields, instead of estimating. And I’d like to get more valves on our irrigation systems.”

Konzen initially worked with NRCS for cost-share funding, but says the technical help the agency offers is equally important. “It’s been a rough couple of years in the dairy business, so the cost-share is helpful. But I value the manpower, too. We’re looking at some expansion, and they’re helping us evaluate where we can handle the extra manure safely. NRCS offers the funding, but they want to be sure you’re using that money in the best way. They work side by side with the water board to help dairymen be environmentally sound, doing the best for the environment and the water as well as the dairyman,” concluded Konzen.



Konzen talks with NRCS District Conservationist Chris Hartley about his use of manure on the farm.